CLAIMS

WHAT IS CLAIMED IS:

1. A method of capturing an image by use of a camera, the method comprising:

placing a scene within a field of vision of a wide angle lens coupled to the camera;

storing image data of the scene in an image collection array;

digitizing the scene image data into a digitized scene image data and storing the digitized scene image data in memory;

based on a command, selecting a subset of the digitized scene image data; and

performing additional processing on the selected subset of the digitized scene image data.

2. The method of claim 1 wherein the camera is used to transmit images on a network.

3. The method of claim 1 wherein the camera is communicatively coupled to a set top box that is capable of transmitting images over data streams in a network.

4. The method of claim 1 wherein the selecting the subset

is controlled by a set top box that is capable to transmit images across a network.

5. The method of claim 1 wherein the performing the additional processing is controlled by a set top box that is capable to transmit images across a network.

6. The method of claim 1 wherein the camera is communicatively coupled to a companion box that is capable to control a set top box for transmitting images across a network

7. The method of claim 1 wherein the selecting the subset is controlled by a companion box that is capable to control a set top box for transmitting images across a network.

8. The method of claim 1 wherein the performing the additional processing is controlled by a companion box that is capable to control a set top box for transmitting images across a network.

9. The method of claim 1 wherein the additional processing comprises:

performing distortion compensation on the selected

subset of the digitized scene image data.

10. The method of claim 1 wherein the additional processing comprises:

performing compression on the selected subset of the digitized scene image data.

11. The method of claim 10, further comprising:

transmitting the compressed selected subset of the digitized scene image data to a destination device.

12. The method of claim 1 wherein the selected subset of the digitized scene image data is based on a pan command.

13. The method of claim 1 wherein the selected subset of the digitized scene image data is based on a tilt command.

14. The method of claim 1 wherein the additional processing includes:

enlarging the image in the selected subset of the digitized scene image data in response to a zoom command.

15. The method of claim 1 wherein the additional processing includes:

enlarging an area of the selected subset of the digitized scene image data in response to a zoom command.

16. The method of claim 1 wherein the camera is connected to a processor device.

17. The method of claim 1 wherein the selecting the subset is controlled by a processor device.

18. The method of claim 1 wherein the performing the additional processing is controlled by a processor device.

19. A method of controlling the capture of an image of an object in a camera field of vision, the method comprising:

storing, in an image collection array, data of a scene within the field of vision;

storing, in memory, digitized data of the scene within the field of vision;

based upon a user command, selecting a subset of the digitized data of the scene to simulate an image captured by at least one of panning, tilting and zooming functions of a camera; and

performing additional processing on the subset of the digitized data of the scene.

20. The method of claim 19 wherein the camera is used to transmit images in a network.

21. The method of claim 19 wherein the camera is communicatively coupled to a first unit that is capable to transmit images in a network.

22. The method of claim 19 wherein the selecting the subset is controlled by a first unit that is capable to transmit images in a network.

23. The method of claim 19 wherein the performing the additional processing is controlled by a first unit that is capable to transmit images in a network.

24. The method of claim 19 wherein the camera is communicatively coupled to a companion unit that is capable of being communicatively coupled to a first unit for transmitting images in a network.

25. The method of claim 19 wherein the selecting the subset is controlled by a companion unit that is capable of being communicatively coupled to a first unit for

transmitting images in a network.

26. The method of claim 19 wherein the performing the additional processing is controlled by a companion unit that is capable of being communicatively coupled to a first unit for transmitting images in a network.

27. The method of claim 19 wherein the camera is communicatively coupled to a processing device.

28. The method of claim 19 wherein the selecting the subset is controlled by a processing device.

29. The method of claim 19 wherein the performing the additional processing is controlled by a processing device.

30. The method of claim 19 wherein the selected subset of the digitized data is based on a pan command.

31. The method of claim 19 wherein the selected subset of the digitized data is based on a tilt command.

32. The method of claim 19 wherein the additional processing includes:

enlarging the image in the selected subset of the digitized data in response to a zoom command.

33. The method of claim 19 wherein the additional processing includes:

enlarging an area of the selected subset of the digitized data in response to a zoom command.

34. The method of claim 19 wherein the additional processing comprises:

performing distortion compensation on the selected subset of the digitized data of the scene.

35. The method of claim 19 wherein the additional processing comprises:

performing compression on the selected subset of the digitized data of the scene.

36. The method of claim 35, further comprising:

transmitting the compressed selected subset of the digitized data to a destination device.

37. An article of manufacture, comprising:

a machine-readable medium having stored thereon

instructions to:

store image data of a scene in an image collection array;

digitize the scene image data into a digitized scene image data and store the digitized scene image data in memory;

based on a command, select a subset of the digitized scene image data; and

perform additional processing on the selected subset of the digitized scene image data.

38. An article of manufacture, comprising:

a machine-readable medium having stored thereon instructions to:

store, in an image collection array, data of a scene within a field of vision of a wide angle lens of a camera;

store, in memory, digitized data of the scene within the field of vision;

based upon a user command, select a subset of the digitized data of the scene to simulate an image captured by at least one of panning, tilting and zooming functions of the camera; and

perform additional processing on the subset of the digitized data of the scene.

39. An apparatus for capturing an image by use of a camera, the apparatus comprising:

means for placing a scene within a field of vision of a wide angle lens coupled to the camera;

communicatively coupled to the placing means, means for storing image data of the scene in an image collection array;

communicatively coupled to the storing means, means for digitizing the scene image data into a digitized scene image data and for storing the digitized scene image data in memory;

communicatively coupled to the digitizing and storing means, means for selecting a subset of the digitized scene image data based on a user command where the user can be local or remote to the camera location (remote access is optionally allowed); and

communicatively coupled to the selecting means, means for performing additional processing on the selected subset of the digitized scene image data.

40. An apparatus for controlling the capture of an image of an object in a camera field of vision, the apparatus comprising:

first means for storing, in an image collection array, data of a scene within the field of vision;

communicatively coupled to the first storing means, second means for storing, in memory, digitized data of the scene within the field of vision;

communicatively coupled to the second storing means, means for selecting a subset of the digitized data of the scene to simulate an image captured by at least one of panning, tilting and zooming functions of a camera, based upon a user command; and

communicatively coupled to the selecting means, means for performing additional processing on the subset of the digitized data of the scene.

41. An apparatus for controlling the capture of an image of an object in a camera field of vision, the apparatus comprising:

a camera including a wide angle lens capable to capture a scene within a field of vision of the wide angle lens;

an image collection array communicatively coupled to the wide angle lens and capable to store data of the scene within the field of vision;

a memory communicatively coupled to the image

collection array and capable to store digitized data of the scene within the field of vision; and

a webcam engine communicatively coupled to the memory and capable to select, based upon a user command, a subset of the digitized data of the scene to simulate an image captured by at least one of panning, tilting and zooming functions of the camera.

42. The apparatus of claim 41 further comprising:

a compression/correction engine communicatively coupled to the memory and capable to perform compression and distortion compensation on the subset of the digitized data of the scene.

43. The apparatus of claim 41 wherein the camera is capable to transmit images over a network.

44. The apparatus of claim 41 wherein the image collection array is capable to store data of an entire scene within the field of vision

45. The apparatus of claim 41 wherein the subset of the digitized data is transmitted to a destination device.

46. The apparatus of claim 41 wherein the webcam engine is included in a set top box unit that is capable to transmit images across a network.

47. The apparatus of claim 41 wherein the webcam engine is included in a companion unit for controlling a set top box unit for transmitting images across a network.

48. An apparatus for controlling the capture of an image of an object in a camera field of vision, the apparatus comprising:

a camera including a wide angle lens capable to capture a scene within a field of vision of the wide angle lens;

an image collection array communicatively coupled to the wide angle lens and capable to store data of the scene within the field of vision;

a processor device including a memory communicatively coupled to the image collection array and capable to store digitized data of the scene within the field of vision, the processor device capable to select a subset of the digitized data of the scene to simulate an image captured by at least one of panning, tilting and zooming functions of the camera.

49. The apparatus of claim 48 wherein the processor device further includes a webcam engine communicatively coupled to the memory and executable by the processor device to select, based upon a user command, the subset of the digitized data of the scene.

50. An apparatus for controlling the capture of an image by a camera, the apparatus comprising:

a camera having a wide angle lens capable to capture a scene within a wide vision field;

an image collection array communicatively coupled to the wide angle lens and capable to store image data of the entire scene within the wide vision field;

sampling and digitizing stage communicatively coupled to the image collection array and capable to read and digitize the image data stored in the image collection array;

a memory communicatively coupled to the sampling and digitizing stage and capable to store digitized image data of the entire scene within the wide vision field; and

a webcam module communicatively coupled to the memory and capable to select a subset of the stored digitized image data based upon user commands.

51. The apparatus of claim 50 wherein the camera is used to transmit images across a network.

52. The apparatus of claim 50, further comprising:

a compression/correction module communicatively coupled to the memory and capable to perform compression and distortion compensation on the subset of the stored digitized data.

53. The apparatus of claim 50 wherein the image collection array is capable to store data of an entire scene within the wide vision field.

54. The apparatus of claim 50 wherein the subset of the stored digitized data is transmitted to a destination device.

55. The apparatus of claim 50 wherein the webcam module is included in a unit that is capable to transmit images across a network.

56. The apparatus of claim 50 wherein the webcam module is included in a companion unit for controlling a set top box

unit for transmitting images across a network.

57. An apparatus for controlling the image capture by a camera, the apparatus comprising:

a unit capable of being communicatively coupled to the camera, and capable to store digitized data of a scene within a field of vision of the camera;

the unit including a webcam engine capable to select, based upon a user command, a subset of the stored digitized data of the scene to simulate an image captured by at least one of panning, tilting and zooming functions of the camera;

the unit further including a processor communicatively coupled to the webcam engine and capable to execute the webcam engine to permit the selection of the subset of the stored digitized data.

58. The apparatus of claim 57 wherein the unit further comprises:

an image correction module communicatively coupled to the processor and capable to perform distortion compensation on the selected subset.

59. An apparatus for controlling the capture of an image

of an object, the apparatus comprising:

a lens capable to capture a scene within a wide field of vision of the lens;

an image collection array communicatively coupled to the lens and capable to store data of the scene within the wide field of vision;

a memory communicatively coupled to the image collection array and capable to store digitized data of the scene within the wide field of vision; and

a processing stage communicatively coupled to the memory and capable to select a subset of the digitized data of the scene in response to a user command for controlling the capture of the image.

60. The apparatus of claim 59 wherein the processing stage further includes a webcam engine communicatively coupled to the memory and capable to select the subset of the digitized data of the scene.

61. The apparatus of claim 59 wherein the processing stage further includes an image correction engine communicatively coupled to the processor and capable to perform distortion compensation on the selected subset.